

# J-SEAL® PU1-800 (GG)

ONE-PART POLYURETHANE GUN GRADE JOINT SEALANT  
- TRAFFICABLE, OIL & FUEL RESISTANT  
- WATER IMMERSIBLE & POTABLE WATER CERTIFIED



## PRODUCT DESCRIPTION

J-Seal® PU1-800 (GG) is a permanently elastic, one component, gun grade polyurethane joint sealant specifically developed to be used as a multipurpose sealant in applications where a high chemical resistance to fuels, oils and hydrocarbons is required. It is also suitable for use in potable water structures. It cures under the influence of atmospheric moisture to form a low modulus sealant with excellent adhesive properties and resistance to ageing and weathering.

Certified according to:  
EN 15651/1 TYPE F INT/EXT CC ; EN 15651/4 TYPE PW INT/EXT CC

Compliant to:

ISO 11600 Type F Class 25 sub-class LM ;

ASTM C920 Type S Grade NS Class 25 Use T1, M, A, O.

Potable water certified to AS/NZS4020 by The Australian Water Quality Centre (AWQC)



## ADVANTAGES

- Permanently elastic over a wide range of temperatures
- Non-sag consistency
- Non-sticky / does not pick up dirt
- Pitch free
- Movement capability 25%
- Easy to gun, can be easily smoothed and levelled out
- Good adhesion to many typical construction materials
- Excellent resistance to ageing & weathering
- Good chemical resistance to spillage (not permanent and continuative contact) with chemical agents especially with hydrocarbons, fuels, diesels and oils
- Can be painted over with many water and solvent based paints (preliminary tests recommended)
- Water immersible and potable water certified



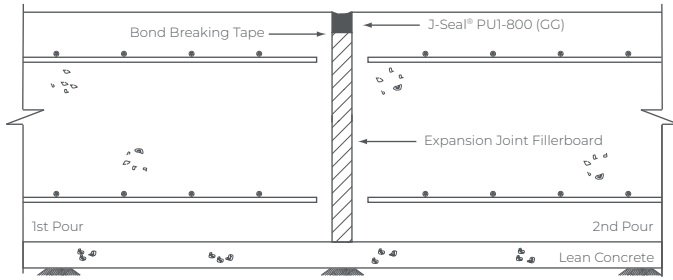
## AREAS OF APPLICATION

- Sealing expansion and construction joints in vertical and horizontal applications
- Indoor and outdoor applications in working areas where there is contact with mechanical chemical agents such as hydrocarbons, oils, fuels, diesels, aviation fuels and so on
- Application for vertical and horizontal joints in road works, airports, tunnel construction, petrol stations, bridges and in all general working areas
- Joints in precast elements
- External walling and cladding joints
- Weatherproofing of joints between brickwork, block-work, masonry, wood and concrete or metal frames
- Joints in walls, floors, balconies, around windows or door frames
- Retaining walls
- Roofing - concrete and metal
- Joints in waste water treatment plants (please consult with CJSA)
- Water immersible joints

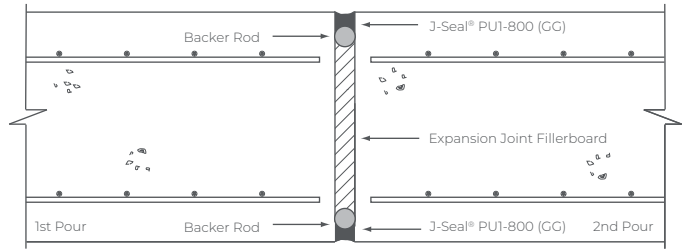
Note : *The product's design and performance, its intended use, installation and final confirmation and approval for use, must be provided by the project's Design Engineer and Project Manager.*



## TYPICAL APPLICATIONS



SLAB ON GROUND APPLICATION



WALL APPLICATION



## PHYSICAL PROPERTIES

PROPERTY	RESULT
Appearance	Non-sag thixotropic paste
Colour	White, Grey & Black
Chemical nature	Polyurethane
Curing mechanism	Moisture curing
Density	1.33 g/cc
Tack-free time (at 23°C and 50% relative humidity)	120 minutes
Curing (at 23°C and 50% relative humidity)	2.0 mm/24h
Shore A (at 23°C and 50% relative humidity; DIN 53505)	30
Elongation at break (ISO 37 DIN 53504)	800%
Elastic modulus at 100% (DIN 52455)	0.4 N/mm <sup>2</sup>
Elastic recovery (DIN 52458)	90%
Admissible joint movement	± 25 % total movement capacity
Chemical resistance to spillage	Lime water    Sea water Caustic soda    Cleansing agents (Oxalic acid) <i>List of liquids for which the joint-sealing system is impermeable and resistant for up to 72 hrs. (medium duty). For these liquids J-Seal PU1-800 is approved according to TRwS (Technical Rules on Substances Hazardous to Water) for sealing surfaces in storage/filling/handling facilities for water-polluting liquids.</i>
Tensile strength (ISO 37 DIN 53504)	1.5 N/mm <sup>2</sup>
Application temperature	+5°C to +40°C
Temperature resistance	-40°C / +90°C



## PACKAGING AND SUPPLY

- 600ml sausage (20 sausages per box)
- 200lt drum (260kg)





## INSTALLATION PROCEDURES

### SURFACE PREPARATION

Joint surfaces must be dry, clean and free of all contamination. Glass, metal and other non-porous surfaces must be free of any coatings and wiped clean with solvent. Precast panels using form-release agents, other than polyethylene film, must be sand-blasted or mechanically abraded and dust free.

### PRIMING

**J-Seal® PU1-800 (GG)** has general good adhesion properties even without the use of primer on most common building materials. However, varieties of brick, natural stone, plastics, paints, coatings and other treatments of surfaces, often present a difficult surface to which to adhere. Due to the number of unpredictable natures of these substrates, a preliminary test is recommended. Apply a coating of J-Seal® N49 Primer on the joint wall/surfaces.

### APPLICATION

Recommended application temperatures: 5°- 35°C. For ease of use or cold weather applications, we recommend the material is stored at approximately 25°C prior to use. In order to guarantee free movement of sealant in joints, it is imperative that the sealant does not adhere to the bottom of the joint, therefore a closed-cell polyethylene bead (joint backing rod) is to be placed at the proper depth or a bond-breaker tape applied. Apply J-Seal® N49 Primer to the sides of the joint and allow to become touch dry before applying sealant. For best performance, sealant should be gunned into joint when the joint width is at mid-point of its designed expansion and contraction position. Firmly extrude sealant into the joint making sure that it is in full contact with the sides of the joint and with the backing rod or a bond-breaker tape at the bottom. Keep the nozzle inserted in the sealant and continue on with a steady flow of sealant preceding the nozzle and avoid overlapping of sealant to eliminate entrapment of air. Sealant should be tooled to a smooth finish ensuring a full contact to the sides of the joint and to the back up material, this will also contribute in breaking any air bubbles which may be formed inside the sealant. Masking tape should be used where sharp exact joint lines or exceptionally neat lines are required. Remove the tape whilst the sealant is still soft.



## LIMITATIONS

- **J-Seal® PU1-800 (GG)** may be painted over, however some coatings may crack if movement occurs, preliminary tests are recommended. Refer to **CJSA** for further information.
- Avoid exposure to high levels of chlorine (avoid use in chlorinated swimming pools).
- Do not cure in the presence of curing silicone sealants.
- Avoid contact with alcohol and other solvent cleaners during cure.
- Do not apply when moisture-vapour-transmission condition exists from the substrate as this can cause bubbling within the sealant.
- When applying sealant, avoid air-entrapment.
- Since system is moisture-cured, permit sufficient exposure to air.
- White colour tends to yellow slightly when exposed to ultraviolet rays.
- The ultimate performance of **J-Seal® PU1-800 (GG)** depends on good joint geometry design and proper application with joint surfaces that have been prepared properly and in accordance to application requirements. Refer to **CJSA** for further information.
- **J-Seal® PU1-800 (GG)** should not be used for structural glazing

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## WRITTEN SPECIFICATION

Where shown in the drawings, the joint sealant shall be **J-Seal® PU1-800 (GG)** polyurethane joint sealant as supplied by **CJSA**. The application/installation of the product must be in accordance with the manufacturer's recommendations and J-Seal® N49 Primer must be used in conjunction with the application of the joint sealant.



## HEALTH AND SAFETY INFORMATION

For further information or advice on health and safety precautions, safe handling, storage and correct disposal of products, please refer to the most recent product Safety Data Sheet (SDS), which is available upon request. In confined spaces or in still air conditions, the use of a ventilation fan or suitable respirator should be used, and the advice and approval of the Site Safety Supervisor is essential.



## DISCLAIMER

The information and the recommendations relating to the application and end use of this product are given in good faith and are based on the information provided by the manufacturer of the product and/or the Company's current knowledge and experience in connection with the product when properly stored, handled and applied under normal conditions and no liability of final function at the job site is assumed. In practice, the differences in materials substrates and actual site conditions are such that no warranty in respect of merchantability of or fitness for particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written and/or oral recommendations, or from any other advice offered by the Company. The Company also has no express or implied knowledge of any particular purpose for which the product is required and any such information given will not be taken into account in the supply of this product. No responsibility or liability by the Company will be accepted for misuse, misreading or derivation from recommended guidelines in respect of this product and the user shall determine the suitability of the product for his intended use and assume all risks and liability in connection therewith. The information contained in our brochure may change at any time without notice. Any use of this product; **J-Seal® PU1-800 (GG)** in any application should be approved as suitable for use/application by the Design Engineer and Project Manager.

**Effective Date: 03 FEBRUARY 2020**

### CJSA

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